

THE OREGON TUALATIN VALLEY AMATEUR RADIO CLUB NEWSLETTER

OTVARC '87: A NEW BEGINNING



SPOTLIGHT ON A HAM

BY LORNA, KA7RFD

Congratulations to Paul Lucas, WB6SHR, recently elected as our President for 1987. Paul should be well known to all of you. For the past

four years he has been our Social Chairman, getting food and entertainment organized for our Christmas party, Field Day and Campout. And what a wonderful job he has done. As President, Paul is hoping to have the Social Committee reinstate the "Dinner Out Nights" which were popular in the past.

Paul obtained his Novice license after an 8th grade Math teacher talked him out of CB and into Ham Radio and had his Advanced license before leaving High School in the San Diego area.

During a temporary work assignment in the Northwest in 1980, Paul fell in love with the area which prompted the move to Portland.

Paul is the Facilities Manager of Integrated Measurement Systems where he is responsible for the general maintenance of the building, perceiving the need for new buildings and equipment and moving

people to better locations.

Wife, Bonnie, is the Corporate Quality Circle Manager for Intel and travels a lot, which leaves Paul as frequent House Daddy to 8-year old Christy who is just beginning to learn code.

In the past Paul enjoyed building equipment and accessories and built a 6-meter AM transmitter/receiver when solid state was first in use. Now he's more into computers, having a Magnum (IBM PC look-alike) and is concentrating on Packet.

His favorite part of Ham Radio is general rag chewing on 10, 15 or 20 meters (with a 50/50 split on phone or CW) and handling traffic on the 20 meters maritime net. This year he got a kick out of participating in "The Boy Scouts Jamboree of the Air" and hopes to do more of this type of thing in the future.

While a member of the North Shore ARC in California, Paul helped sponsor a program to assist blind people to get their amateur licence. He still keeps in touch with Larry, WA6AIL, who went from Novice to Extra in less than one year.

Other hobbies include woodworking, camping in the family trailer and salmon fishing.

Paul anticipates a fun filled year as President and his only hope is that he has a little time to make an occasional contact on the air.



JANUARY PROGRAM PORTABLE REPEATERS

Two of our own members, Wes, K7WNC and Dave, WB7REC will be giving a presentation on Portable Repeaters.

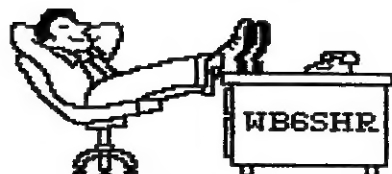
Their repeater will be in operation on low power at the club meeting on a frequency of 146.30-146.90 MHz. Wes and Dave saw the need for such a system for Emergency Service and for Public Service events and will be ready to answer your question on the reasons for doing it, what it takes and any technical questions.

A real interesting evening in store.

THE PREZ SAYS

BY PAUL, WB6SHR

First of all, thank you for voting me in as your next President. I am honored to hold the position and I assure you I will provide the leadership needed to keep our club active, healthy and strong. I also thank the 1986 club officers for



their efforts last year and hope they will continue to support the club, new club officers and club activities throughout 1987.

It could be the busiest year the club has ever seen. There will be plenty of projects to work on and a lot of fun times and good fellowship for those who are involved.

I will be working with the Board and committee members to decide on a theme for this year. Hopefully, we will be able to establish some goals for the club and start some new trends. We already have some plans under way - so hold on to your hat!

One final comment. Hams join OTVARC because they like to have fun. If they don't have fun they leave! The club officers and committee leaders will try to present good programs this year that will encourage people to come out and have fun but the success of the programs and activities are dependent upon your participation.

If you want to see the club grow strong as I do, please lend a hand this year. We could use your help.

Thank you again for letting me be your President. I look forward to seeing you at our next club meeting.

Best regards,

PAUL, WB6SHR



1987 OTVARC OFFICERS

PRESIDENT	PAUL	WB6SHR
VICE PRES	ROGER	K7RXV
SECRETARY	JEFF	K7JF
TREASURER	SUE	N7EFE
TRUSTEES	GREG	W7AGQ
	TERRY	WB7CHK
	RANDY	KA7HJT
	DEE	KA7NPN
	AL	WB7SIC

Club meetings are held on the SECOND Wednesday of each month at Beaverton Elks Lodge 3500 S. W. 104 Avenue

The OTVARC Newsletter is published monthly by the Newsletter Committee of the Oregon Tualatin Valley Amateur Radio Club, Inc. The opinions, views and recommendations of its contributors are not necessarily those of the Club, its officers, advertisers or Newsletter Committee.

Articles may be submitted to PO BOX 25545, Portland, Oregon 97225-0545. Cutoff date is the 20th of each month. Letters to the Editor must be signed and authors will be verified.

Lorna Campbell, KA7RFD Editor-in-Chief
Jeff Freedman, K7JF Technical Editor

LORNA'S LOOKOUT

BY LORNA, KA7RFD



A time for NEW beginnings. A NEW Year, NEW Officers and NEW ARRL Officials.

We expect a long overdue NEW and harmonious relationship with our NEW Divisional Director, Rush Drake, W7RM, and Vice Director, Bill Shrader, W7QMU.

Effective January 1, Randy Stimson, K2ZT, will become the NEW Section Manager for Oregon having been appointed to fill Bill's unexpired term.

NAR-C has been revitalized and plans are underway for the 1988 National Convention headed up by the NEW Chairman, Al Berg, WB7SIC. Other members of our club have a key role in this organization.

Our NEW President and his Officers have wonderful plans for 1987 and will also reintroduce some of the events which were popular in the past.

NEW volunteers are already in place as committee chairpersons. Joan Schouweiler, KA7UXC will take over the Social Committee. Roy Nunley, N7DUJ will be in charge of buying the prizes and selling tickets for the monthly club raffle and Bonnie Antons, wife of Tony, KA7ZDE will take over the Ladies door prizes.

NEW members join our ranks at every meeting.

We thank all Officers and Committee persons who have served so admirably in 1986.

Now it's time for the NEW year. Please give of your talents to make our club even stronger. Volunteers are always needed and remember you only get out of anything what you put into it.

HAPPY NEW YEAR TO YOU ALL!

MEMBERS CELEBRATE JANUARY BIRTHDAYS



Congratulations
to the following
members who are
celebrating their
birthdays this
month --

KATHJT	Jan 8	WD6ASI	Jan 21
N7HEJ	10	WB7UNU	21
KA0SSF	12	KATMIE	22
W7ISP	13		

A COUPLE OF REMINDERS A COUPLE OF REMINDERS

BY JEFF, K7JF

We really appreciate all of the data input forms which were returned with your annual dues. There are, however, a GREAT NUMBER of members who have still not renewed for 1987. Remember, dues must be RECEIVED by January 31 to assure your continued membership and receipt of the club's newsletter. Please send your \$10.00 now.

The Board of Directors will be meeting January 7. A motion may be referred to the membership to amend the By-Laws regarding Life Membership.

SIC HUMOR

BY AL, WB7SIC



Guess what hon, the
doctor says it might
be twins!

VISIT YOUR LOCAL HEATHKIT ELECTRONIC CENTER

516 S. E. Chkalov Dr. #1
Vancouver, WA 98664
(206) 254-4441



NEW MEMBERS CORNER

BY KATHRYN, KATUMB

Hope your Holidays were wonderful and that 1987 brings good things to you and yours. OTUARC welcomes five new members, including Associate member Bobbie Antons, wife of Tony, KA7ZDE. Tony just upgraded to Technician class. Bobbie is considering obtaining her license, but with seven children, eight grandchildren and her work with Tupperware -- need we say more. Bobbie has volunteered to obtain the XYL door prize each month.

Jeff Damm, WA7MLH is an Advanced class ticket holder, working as an Electrical Engineer for Triquint Semiconductor. Jeff is an ARRL member with interests in SSB, CW, Experimenting and computers. Hobbies include flyfishing, cross country and alpine skiing and snow camping. Our project nite should contact Jeff, as he is also interested in homebrewing.

John Ewing, K7SHC is a General class operator, married to Carol and works as an operating room Registered Nurse at the Portland VA Hospital. John is a life member of the ARRL and is interested in CW, SSB, Packet, UHF/UHF and computers. Hobbies include running, as an avid member of the Oregon Road Runners Club. Club interests include Field Day and Public Service committees.

Associate Member Dick Glass is working on his license with a goal of SSB, CW and computers. Dick is involved in market research and advertising through his business, On Target, Inc. Hobbies include fly fishing, music, art and writing.

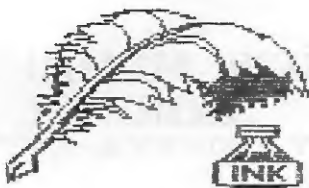


John Mackey, Jr., KA0SSF is a Technician with XYL Noelle, KA7YRQ. John is employed by Northwest Health Council. Interests include UHF/UHF, computers and Ten Meter FM. Hobbies include antique cars. John expressed an interest in Emergency Services.

Dinah Tucker, KAOEPR is a Novice with OM Joseph, NOJO, both work afternoon shifts, so we might not see much of them at meetings. Dinah is interested in CW and may be able to contribute to the Newsletter. Not much other info provided on interests and other hobbies.

Word has it that Jeff, K7JF and Amy, N7HJD finally received their adopted daughter, Jamie from Korea late last month. Hope we get to see the little lady soon.

A reminder that family memberships are available - a real bargain.



LETTERS TO THE EDITOR

To the members of OTUARC:

I would like to contribute something to the Club. How would the YL's and the XYL's like for me to send in a special recipe once in a while? They would be something that is real good and not in everyone's collection.

Some would come from my published book and some that I have acquired since it came off the press.

If gals like it, they can let me know what type they like best and I will try and keep them satisfied.

I could also donate something from my Licensed Kitchen, that you could sell to help build up the Treasury, but according to Doc, W7GWC, we are not allowed to sell food. Maybe he didn't realize that I was licensed by the State of Oregon to sell my food, but I am and have been since January 1981. Or, was it because you let someone else have that privilege?

If you find that you can use what I have to offer, let me know and I will contribute what I can, when I can.

T3 and 88,

Betty Hartzig, W7CPV #346

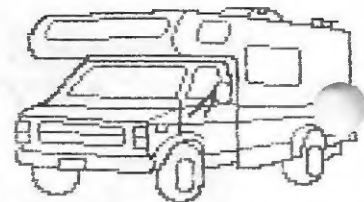
Asst. Ed. Note: Betty has been an OTUARC member from Grants Pass for many years. Besides her very active ham schedule (you can hear her on most of the state traffic nets on 75 meters), Betty owns and operates Betty's Enterprises, a restaurant catering business. Although not able to attend our meetings, we certainly appreciate her interest in helping the Club, and welcome Betty's famous recipes for publication in the Newsletter.



Your 1987 OTUARC Board of Directors
Absent is Terry Biggs, WB7CHK

JANUARY CAMPOUT PLANNED

BY TONY, KATZDE



Due to a great number of last-minute cancellations, the December campout was postponed.

Not to worry, however, we have re-scheduled our North Depoe Bay expedition for the THIRD weekend in January. All club members and their families are welcome to join us. More details at the January club meeting.



HEARD AROUND THE CLUB

BY JEFF, K7JF

Congratulations to Linda Cereghino, N7CZY on her recent marriage to Galen King. Hope to see both of you at a meeting very soon.

Dave Palmrose, ex-N7FCA has upgraded to Extra Class and now sports the call NY7C. Good job!

KATBSD was overheard on ten meters recently. Sounds like the 'Ol Doc is getting situated at his Sherwood QTH.



CLUB DIRECTORY

PUBLIC SERVICE	RANDY	297-1175
	BUD	649-1523
CONTESTS	JEFF	297-7965
PROJECT NIGHT	TERRY	648-3687
TECHNICAL	DEE	646-4580
CLUB RAFFLE	JIM	246-2539
PROGRAMS	WILLIS	292-1656
CLUB SOCIALS	PAUL	641-8703
EMERGENCY SVC	PAUL	244-7520
TRAINING/EXAMS	RANDY	649-5066
JACKETS	KATHRYN	292-1360
BADGES	JEFF	297-7965
ROSTER CHANGES	JEFF	297-7965
ARRG INFO	WARREN	644-0752
ARCHIVES	SUSAN	640-1989
NEWSLETTER	LORNA	297-1175
ARRL RENEWAL	RANDY	297-1175

ARRL APPOINTEES

LEGAL COUNSEL	STAN	635-6383
TECHNICAL	WES	649-3235
CLUB COORD.	BOB	297-2732

ARES COORDINATORS

DISTRICT	RANDY	297-1175
WASHINGTON CO.	PAUL	244-7420

1987 OTVARC ACTIVITY CALENDAR

Updated 12-1-86

JANUARY	FEBRUARY	MARCH	APRIL
7 Board/Committee Mtg.	4 Board/Committee Mtg.	4 Board/Committee Mtg.	1 Board/Committee Mtg.
14 OTVARC Club Meeting	11 OTVARC Club Meeting	9 Fund Raising Project	8 OTVARC Club Meeting
17-18 Club Camping Trip	21-22 Club Camping Trip	11 OTVARC Club Meeting	9 Rusty Key Contest
28 Club Project Night	22 "Club Dine Out Night"	21-22 Club Camping Trip	18-19 Club Camping Trip
	25 Club Project Night	25 Club Project Night	22 Club Project Night
			25 Club Allstar Auction
MAY	JUNE	JULY	AUGUST
6 Board/Committee Mtg.	3 Board/Committee Mtg.	1 Board/Committee Mtg.	5 Board/Committee Mtg.
13 OTVARC Club Meeting	6 Portland Rose Parade	8 OTVARC Club Meeting	8 Hood to Coast Run
16-17 Club Camping Trip	10 OTVARC Club Meeting	11 Diabetes Bike-A-Thon	12 OTVARC Club Meeting
27 Club Project Night	13 Trask Mtrcycle Trials	18-19 Club Camping Trip	14-16 Club Campout/Picnic
30-31 SEA-PAC Conv.	14 M.S. 150 Bike Tour	19 Hagg Lake	27 Club Project Night
	20-21 Club Camping Trip	22 Club Project Night	
	24 Club Project Night		
	26-28 FIELD DAY		
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
2 Board/Committee Mtg.	7 Board/Committee Mtg.	4 Board/Committee Mtg.	2 Board/Committee Mtg.
9 OTVARC Club Meeting	14 OTVARC Club Meeting	11 OTVARC Club Meeting	9 OTVARC Club Meeting
11-13 Bvrtn Good Nbr Days	15 Happy Hour Contest	14 Lions Phone Bk Pickup	11-13 Ten Meter Contest
19-20 Club Camping Trip	17-18 Club Camping Trip	15 W.A.S. Club Contest	16 Club Project Night
19-20 Art Quake	17-18 Scouts On The Air	21-22 Club Camping Trip	19 Club Christmas Party
30 Club Project Night	24 "Club Dine Out Night"	25 Club Project Night	19-20 Club Camping Trip
	28 Club Project Night		

Please note the following:

Some of the activity dates listed above are prescheduled and are not confirmed yet.

When confiraation occurs, updated calendars will be made available at the club meetings.

If you have questions about a particular date or activity, contact one of the club officers.

Specializing in Personalized
Covers For:

KAGIL

"Over the
Top
Coverings"

- TRANSCEIVERS
- COMPUTER KEYBOARDS
- AMATEUR RADIO EQUIP.
- VIDEO RECORDERS
- OFFICE EQUIPMENT

Kathy & Gil Brentley

P. O. Box 06780 Res: 503-771-0015
Portland, OR 97206

AMATEUR RADIO RELAY GROUP, INC.
P. O. Box 10031 Portland, Oregon 97210

Yearly Dues:

Full: \$20. with autopatch
Associate: \$12. no autopatch
Family: add \$10. per member

Operating Repeaters on:

SOUTH SADDLE MOUNTAIN
147.32 (+ offset) (autopatch) (PDX, FGR)
449.225 (- offset)
CHANNEL 6 TV TOWER
147.04 (- offset) (autopatch) (PDX, VAN)
449.325 (- offset)

TELEPHONE (503) 223-2228 KX7Y

STAN WEINSTEIN

ATTORNEY AT LAW

SUITE 522 BOARD OF TRADE BUILDING
310 S. W. FOURTH AVENUE
PORTLAND, OREGON 97204



FRINGING AND BINDING IS OUR
SPECIALTY

DAN'S CUSTOM
CARPET SERVICE
PHONE: 775-5513

DAN DOBSON
KR7Z

7715 S. E. 92ND AVE.
PORTLAND, OR 97266

KQ7I

JEFFRY D. SCHULTZ, CPA PARTNER

ANGEL, CROUSE & CO.
CERTIFIED PUBLIC ACCOUNTANTS

2061 N. W. HOYT STREET
PORTLAND, OREGON 97209
(503) 228-4307

MODULAR DATA SYSTEMS

COMPUTER CONSULTANTS

KIRKE E. JOHNSON

WB7FXZ

9030 N. W. Lovejoy (503) 297-6173
Portland, OR 97229

STILL OREGON'S ONLY
FULL TIME
AMATEUR RADIO
DEALER!



KENWOOD



YAESU

TELEX

hy-gain

We Support Local Club Activities!
Consignments Trades

PORTLAND
RADIO

1% Club
Rebate

1234 S.W. Stark Street
Portland, Oregon 97205
Telephone: (503) 228-8647

SUPPLY

Your Local Ham Headquarters
For Over 30 Years!

PROJECT NIGHT

BY TERRY, WB7CHK



First off, a big thank you to all the members who have come to me with their thoughts and suggestions for projects. We have some good ideas.

For the benefit of those new members who may not know what Project Night is, we are planning on meeting one night a month to

assemble the kits of the selected projects. This will include building, operational check, etc. There will be a sample to refer to and someone to aid you in the construction. It's educational and lots of fun, so if you like to build electronic projects, or would like to try for the first time, be sure to let me know when the project of your interest comes around.

Our first series will be a transmitter, receiver, transceiver for QRP (low power). Information is being collected and the Technical Committee will decide which project will come first.

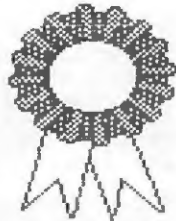
The intent is for Project Night to become an ongoing club activity. Soon I will have more information like when, where, cost, etc. In the meantime, keep the suggestions coming and contact Dee, KA7NPN, Paul, WB6SHR or myself.

PUBLIC SERVICE

BY RANDY, KZ7T



I would like to take this opportunity to thank everyone who participated in Public Service events this past year.



We had one less participant, 47 instead of 48, but we gave 92 more hours of service and drove 176 additional miles.

Special thanks should be given to Bud, KC7PS; Mike, KE7HS; Lorna, KA7RFD; Roy, N7DUJ and Rick, KA50LH.

For any of our new members who are not aware of our Public Service program, some of the events we regularly cover include the Hood to Coast Relay, Portland Marathon and Rose Festival Parade and Hagg Lake Triathlon.

Planning sessions are frequently held at a local Pizza parlor and often pot-luck lunches are organized after an event. We have a lot of fun.

Ham bodies are always needed, so if you would like to participate in 1987, please give me a call at 297-1175.

1988 ARRL NATIONAL CONVENTION

BY AL, WB7SIC



As some of you know, work has begun anew on the National. Several of the people who left the committee have returned and along with that, quite a few new helpers have come forth. A years delay in planning, while not critical, will cause a few items to be put on rush. The committees should be able to play catchup and be on an even keel in about four months. The very most important item being attacked is that of filling out the various committees with capable hams. There will be quite a few of those who have helped with SEA-PAC asked to serve, but in no way is this to indicate that the convention is mostly run by OTVAREC.

The various clubs in the area will and are being approached to obtain help. We DO want to have the expertise at every level, as a National is not the place to learn. We can't say "Sorry about the mistakes, we will try to do better next year." There is no next year.

Most recently, the officers of Hoodview were consulted with and it is intended to do the same, where permissible, with other clubs in the area. We say area because of logistics. Long distance travel to meetings is prohibitive and long distance phone calls are worse. The majority of help must come from mostly local hams. We have a couple of exceptions to the case at present. One is the Salem club, which should not be a problem and the other is the Bend repeater group. They are offering to help with the convention station and that requires very little prior work so the distance away does not does not cause undue hardship.



The original sight, Jantzen Beach Red Lion, was given up some time ago because of the date conflict with the Tacoma Hamfair. To keep the convention dating within summer time, the Red Lion at the Lloyd Center was tentatively secured although not contracted for. The problem there was in RV parking so the Jantzen Beach site was re-approached for a time in September. At the present time, negotiations are being made for Jantzen Beach.

More to follow as plans are put together!

STANLEY HAMM-TOWERS

PART IV

BY STAN, W7NI

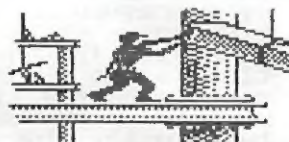
So far I've talked mostly about unguyed crank-ups. Let's look at guyed crank-ups for a bit.



There are two basic ways used to string the cable that extends the tower (guyed or unguyed).

One way uses a separate piece of cable for each section and the piece that is wound on the winch is the piece that extends the largest moveable tower section. As that section goes up, the section above extends at the same rate as does the section above that, and so on. This means all sections extend together. This is not a problem for an unguyed tower, but for a guyed tower, this means only the bottom set of guys is tight until the tower is fully extended. I get nervous around these towers when only the bottom 20 feet of a 70 footer has tight guy wires.

The second way to string a crank-up cable is to use one continuous piece of cable that weaves through a series of pulleys. With this arrangement, the lightest section goes up first. This is almost always the top section which is smallest and generally lighter than the next section even when you include the the weight of the rotator, mast and antennas. I have never seen any but the top section extend first on this type of tower. Again, only the bottom section will have tight guy wires until the tower is fully extended. Again, I get nervous when there is more unguyed tower up there than guyed tower.



As you might expect, someone came up with a scheme to clamp the top sections together forcing the second section from the bottom to extend first until its guys were tight. Now the problem was to prevent this section from dropping back down when the clamp was released so the next section could be cranked up. Remotely controlled "stops" were used as was a remotely controlled clamping scheme. How else could you do this without climbing the tower? Naturally, these things occasionally jam and the problems get real nasty. The temptation to climb it and clear the jam is overwhelming. You must resist this temptation, however, because this tower has you in mind as a victim of a bad accident. I really do not like crank-up towers.

The major reason people go for crank-ups is because they fear heights. I understand this fear although, fortunately, I am not troubled with it personally. The second most common reason is that they don't look so obvious to your

neighbors when cranked down. There is another type of tower that solves the fear of climbing problem - a tilt-over. Rohn is the only company I know that makes a tilt-over.

I can't remember how many people I've shocked by quoting the price of a new tilt-over Rohn 25. The tilt-over hinged section with its winch and hardware is about \$650 alone, not counting the rest of the tower sections and guying hardware. You don't even want to know what the equivalent in a Rohn 45 would be.

One serious limitation to a tilt-over is height. 70 feet is maximum. If you try to go higher by adding sections to the bottom part below the hinge, too much stress is applied to the tower legs while it is being tilted up with maximum stress occurring as the tower goes through horizontal position. I actually witnessed a Rohn 25 tilt-over collapse at the first bolted joint above the hinge during tilt-up. The owner was just trying to squeeze too much out of the system. He had added one too many sections above the hinge.

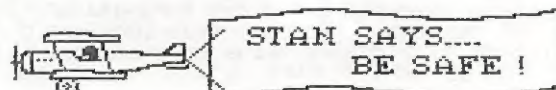


If you buy a used tilt-over, be sure to get a copy of the specifications. The weight it will support at the top while being tilted is critical. Too much weight along with too much height above the hinge leads to failure.

The good news is that a tilt-over CAN be climbed. (Of course, if you don't mind climbing towers, why would you buy a tilt-over?) No one in his right mind would try climbing a tilt-over which is part way up so they tend to be less harmful to humans.

Tilt-overs have to be guyed at least at the hinge and preferably at the top, too, when fully up. Because of the way they are constructed, tilt-overs must be guyed four ways instead of the normal three ways. This is because the lever arm or "backbone" comes right down directly on top of one guy wire as the tower is raised unless it is split into two guy wires which are separated to make a space between them.

Part V coming up... 73



PUBLIC SERVICE 1986

CALL	NAME	NO OF EVENT	TTL TIME	TTL MILE
AL7W	LEA	1	7	12
K7WWG	WES	3	65	680
KA5QLH	RICK	9	61	370
KA7DWD	BOB	3	22	114
KA7HOJ	JACK	1	8	26
KA7KBH	GENE	1	10	60
KA7KNG	SHERRILL	2	13	150
KA7QUV	VAL	1	8	
KA7RFD	LORNA	12	114	116
KA7RNN	ROGER	2	12	36
KA7SIK	RON	2	13	65
KA7SOQ	JAMES	1	10	60
KA7SSX	JENNY	2	21	120
KA7Tzt	MARVEL	1	8	
KA7UFG	PAT	2	9	10
KA7UMB	KATHRYN	4	31	64
KA7VXC	JOAN	3	37	
KA7WQF	CHRISTY	1	4	
KC7PS	BUD	20	126	1,139
KE7BB	VAN	1	7	20
KE7HS	MIKE	20	103	150
KO7B	ALAN	1	8	36
KQ7L	BERNIE	1	8	55
KZ7T	RANDY	23	183	1,829
N7CRQ	MARK	1	3	20
N7DCQ	JOHN	1	5	10
N7DDK	DON	1	5	15
N7DUJ	ROY	9	71	435
N7DWL	DAVE	1	4	20
N7EPE	SUSAN	3	35	100
N7HPI	PAUL	1	10	60
NA7T	STEVE	1	4	20
NI7M	BRUCE	1	28	25
NJ7L	GARY	1	7	25
NS7D	STEVE	1	7	20
W7AXJ	ERNIE	1	8	39
W7FBP	DALE	6	40	280
W7ISP	DEL	1	8	56
W7JOI	JIM	1	4	15
W7JWG	BERT	2	22	200
W7LRB	LUCKY	2	14	70
WA6KLA	NEIL	4	39	155
WB7BBF	GARY	1	6	20
WB7BBG	PAUL	4	33	154
WB7FJC	JANET	4	23	50
WB7PRL	JIM	1	6	20
WB7REC	DAVE	3	57	490

TOTAL: 1,327

7,411

Oregon Tualatin Valley
Amateur Radio Club
P. O. Box 25545
Portland, OR 97225-0545

Address Correction Requested



To:

